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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,020	10/06/2003	David Joe Steele	2001-IP-005305 U1 USA	6184

30652 7590 08/02/2005

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EXAMINER

NEUDER, WILLIAM P

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/681,020

Applicant(s)

STEELE ET AL.

Examiner

William P. Neuder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-106 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 10, 12, 13, 15, 32, 34-37, 43, 55-61, 72-74, 76, 77, 84-86, 91-101 and 104-106 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9, 11, 14, 16-31, 33, 38-42, 44-54, 62-71, 75, 78-83, 87-90, 102 and 103 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/31/04 and 3/29/0</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

Claims 44 and 53 are objected to because of the following informalities: In claim 44, lines 1 and 2, no antecedent basis could be found for "the slidable sleeve" and "the injection port". In claim 53, line 1, no antecedent basis could be found for "the brain". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 10, 12, 13, 15, 32, 34-37, 43, 55-61, 72-74, 76, 77, 84-86, 91-101 and 104-106 are rejected under 35 U.S.C. 102(b) as being anticipated by Ledent 4,209,065.

Ledent discloses a method using a thermally controlled tool (figure 2). As to claims 2, 91 and 104, the tool is a valve. As to claims 3, 92 and 105, the valve is used to control the flow of fluid into a well. As to claims 4 and 56, the fluid is water. As to claims 5 and 58, the wellbore is of common configuration. As to claims 10 and 59, the valve is bimetallic. As to claims 12 and 60, an injection port is defined in valve seat 8. As to claims 13 and 61, rod 6 is an opening/closing mechanism that is responsive to

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temperature. As to claims 15 and 37, the rod expands and contracts to control valve head 9. As to claim 32, rod 6 regulates flow through the injection port. As to claims 34 and 35, valve body 7 and seat 8 are threadably connected in the tubing. As to claims 36 and 57, the tubing is production tubing. As to claim 43, the valve head 9 is aligned with the injection port when the temperature reaches the set point. As to claims 72-74, valve 9 has a thermally controlled element 6. As to claims 76 and 77, a temperature sensor is coupled to the mechanical actuator. As to claims 84-86 and 97-101, element 6 is made from a thermally expandable metal material. As to claims 93 and 105, the valve is actuated between fully open, fully closed and intermediate positions. As to claim 95, the tool is controlled in response to a sensed temperature.

Claims 1-5,8,10,12,13,15,32,34,37,43,55-61,72-74,84-86,91-101 and 104-106 are rejected under 35 U.S.C. 102(e) as being anticipated by Zisk, Jr. 6622794.

Zisk discloses a method using a thermally controlled tool (figure 12). As to claims 2,91 and 104, the tool is a valve. As to claims 3,92 and 105, the valve is used to control the flow of fluid into a well. As to claims 4 and 56, the fluid is water. As to claims 5 and 58, the wellbore is of common configuration. As to claim 8, multiple valves are arranged in series. As to claims 10 and 59, the valve is bimetallic. As to claims 12 and 60, an injection port is defined in valve seat 22. As to claims 13 and 61, member 62 is an opening/closing mechanism that is responsive to temperature. As to claims 15 and 37, the member expands and contracts to control valve head 9. As to claim 32, member 62 regulates flow through the injection port. As to claims 34 and 35, valve body and seat are threadably connected in the tubing. As to claims 36 and 57, the

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tubing is production tubing. As to claim 43, the valve head 60 is aligned with the injection port when the temperature reaches the set point. As to claims 72-74, valve 60 has a thermally controlled element 62. As to claims 84-86 and 97-101, element 62 is made from a thermally expandable metal material. As to claims 93 and 105, the valve is actuated between fully open, fully closed and intermediate positions. As to claim 95, the tool is controlled in response to a sensed temperature.

Allowable Subject Matter


Claims 6,7,9,11,14,16-31,33,38-42,44-54,62-71,75,78-83,87-90,102 and 103 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William P Neuder
Primary Examiner
Art Unit 3672

W.P.N.